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Report No. 131500-610
12 August 1977

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MAINTAINABILITY TEST REPORT
FOR THE
AN/TRN-41 TACAN NAVIGATIONAL SET.

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Department of the Air Force, Headquarters Electronic
Systems Division (AFSC), Hanscom Air Force Base,
Massachusetts 01731, Attention: PPG: *DR1*

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Department of the Air Force
Headquarters Electronic Systems Division (AFSC)
Hanscom Air Force Base
Massachusetts 01731

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17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) AN/TRN-41 TACAN Navigational Set		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This report describes the maintainability demonstrations conducted on Navigational Set, TACAN, AN/TRN-41 as described in the Maintainability Demonstration Plan.		

MAINTAINABILITY DEMONSTRATION REPORT

for the
NAVIGATIONAL SET, TACAN AN/TRN-41

This report describes the maintainability demonstrations conducted on Navigational Set, TACAN, AN/TRN-41 as described in the Maintainability Demonstration Plan.

1. **Test Identification.** The maintainability demonstration is used to show that the AN/TRN-41 meets the maintainability requirements of Specification No. 404L-701-5017A. Part I of two parts dated 20 August 1976.

2. **Functional Purpose.** This demonstration forms a part of the AN/TRN-41 qualification tests.

3. **Test Objectives.** The maintainability demonstration is used to show that the Mean Corrective Maintenance Times (Mct) for organizational and intermediate levels of maintenance and the Maximum Corrective Maintenance Time ($M_{max_{ct}}$) for intermediate level meet the requirements of paragraph 3.2.4 of Specification No. 404L-701-5017A, Part I of two parts.

4. **Description of Test Article.** The AN/TRN-41 system was used during the maintainability demonstration.

5. **Summary of Test Results.** Attachment 1 lists all tasks and total repair times for the organizational and intermediate levels of maintenance. All calculations for determining Mct and $M_{max_{ct}}$ are shown. Following is a list of these times and the specification requirements. All times are within specification.

	Demonstrated Mct	Specification Mct	Demonstrated $M_{max_{ct}}$	Specification $M_{max_{ct}}$
Organizational Maintenance	2.96 min.	20 min.	--	--
Intermediate Maintenance	17.41 min.	30 min.	35.04 min.	90 min.

6. **Description of Test Facility and Procedures.** The test facilities and test procedures are described in the Maintainability Demonstration Plan.

7. Test Set Up Diagrams. The test setup diagrams are provided in the Maintainability Demonstration Plan.

8. List of Test Equipment. The following is a list of test equipment used, with manufacturer and model number, and calibration data if applicable.

<u>Name</u>	<u>Type</u>	<u>Calibration Due Date</u>
Multimeter, Digital	Tektronix 465	7/6/77
Oscilloscope		
Power Meter	HP 432	1/78
Counter, Electronic	Fluke 1953A	8/12/77
Peak Power Calibrator	HP 8900B	9/19/77
Power Supply	Delton Series SP	12/4/77
Thermistor Mount	HP 478A	N/A
Directional Coupler 20 dB	Narda 3042B	N/A

The monitor/test set called out in the Maintainability Demonstration Plan was not available for the demonstration. The test equipment shown in Figure 1 replaced the test set.

9. Recorded Test Data. Attachment 2 contains the Maintainability Demonstration Analysis sheets for all the tasks accomplished during the maintainability demonstration of organizational and intermediate levels of maintenance. On tasks for the RT during intermediate level a standard time was determined during the first two tasks for removing and installing the RT case and then this standard time was used for all subsequent tasks that required removal of the case and the case was left off. This was done to reduce total demonstration time.

10. Ambient Conditions. The maintainability demonstration was performed in laboratory ambient conditions.

11. Test Results Analysis. The results shown in Attachments 1 and 2 show that the AN/TRN-41 meets the maintainability requirements of Specification No. 404L-701-5017A, Part I of two parts.

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NTIS	B file Section	<input type="checkbox"/>
DDC		<input type="checkbox"/>
UNANNOUNCED		
JUSTIFICATION		
BY	DISTRIBUTION/MAINTENANCE CODES	SPECIAL

23 68

12. **Certification.** Each Maintainability Demonstration Analysis sheet has been signed by Montek Engineering and Quality Assurance representatives and by a DCAS representative, certifying that the test results are authentic, accurate, current and in accordance with the related test plans.

ATTACHMENT 1
SUMMARY OF MAINTAINABILITY DEMONSTRATION
TASKS AND CALCULATIONS

ORGANIZATIONAL LEVEL TASK DATA
MAINTAINABILITY DEMONSTRATION

NOTE: THE TASK DATA WILL BE SHOWN IN THE SEQUENCE THAT THE TASK WAS PERFORMED.

<u>TASK NO.</u>	<u>TOTAL TIME TO REPAIR</u>
16	1.8 Minutes
12	2.1 Minutes
44	2.8 Minutes
47	2.0 Minutes
45	3.9 Minutes
19	1.9 Minutes
30	3.7 Minutes
11	3.7 Minutes
37	2.1 Minutes
2	5.1 Minutes
8	3.1 Minutes
26	3.3 Minutes

$$\Sigma = 35.5$$

$$T_{avg} = 2.96 \text{ minutes}$$

None of 12 tasks exceeded 20 minutes; therefore, the requirement to demonstrate $\overline{Mct} < 20$ minutes is satisfied.

INTERMEDIATE LEVEL TASK DATA
MAINTAINABILITY DEMONSTRATION ANALYSIS

NOTE: THE TASK DATA WILL BE SHOWN IN THE SEQUENCE THAT THE TASK WAS PERFORMED.

<u>TASK NO.</u>	<u>TOTAL TIME TO REPAIR</u>
9	6.7 Minutes
48	7.7 Minutes
44	54.2 Minutes
89	16.7 Minutes
11	7.2 Minutes
104	13.1 Minutes
179	6.0 Minutes
51	7.8 Minutes
182	10.0 Minutes
125	17.7 Minutes
67	10.8 Minutes
154	23.1 Minutes
78	13.0 Minutes
62	13.9 Minutes
87	13.2 Minutes
24	12.6 Minutes
68	15.6 Minutes
20	17.6 Minutes
166	23.1 Minutes
172	1.6 Minutes
2	6.3 Minutes
47	7.9 Minutes
69	11.3 Minutes
26	11.5 Minutes
155	19.9 Minutes
120	15.5 Minutes
18	10.7 Minutes
12	8.1 Minutes

INTERMEDIATE LEVEL TASK DATA
MAINTAINABILITY DEMONSTRATION ANALYSIS

<u>TASK NO.</u>	<u>TOTAL TIME TO REPAIR</u>
61	11.4 Minutes
141	21.1 Minutes
57	9.2 Minutes
110	18.6 Minutes
98	10.0 Minutes
86	13.5 Minutes
127	13.0 Minutes
134	13.0 Minutes
74	8.9 Minutes
4	7.6 Minutes
83	7.2 Minutes
30	11.7 Minutes
109	18.6 Minutes
183	27.0 Minutes
149	39.5 Minutes
178	12.0 Minutes
168	24.6 Minutes
52	8.7 Minutes
143	23.0 Minutes
167	44.7 Minutes
147	35.5 Minutes
175	17.2 Minutes

$$\Sigma = 778.8$$

$$t_{avg} = 15.576$$

$$\bar{M}_{ct}' = 15.566 \text{ minutes}$$

$$\bar{M}_{ct}' + \frac{\sigma (M_{ct}')}{\sqrt{N_c}} = 15.576 + \frac{1.28 - 10.128}{\sqrt{50}} = 17.41 \text{ Minutes}$$

Since 17.41 minutes is less than 30 minutes, the requirement to demonstrate MTTR less than 30 minutes is satisfied.

$$M'_{\max_{ct}} = \text{Antilog} \left[\overline{\text{Log } M_{ct}'} = 1.645 \sigma \text{ Log } M_{ct} \right] = \text{Antilog} (1.11794 + 1.645 \times 0.25935)$$

$$M_{\max_{ct}} = \text{Antilog} (1.11794 + 0.42663) = \text{Antilog } 1.54457 = 35.04 \text{ Minutes}$$

Since $M'_{\max_{ct}}$ (35.04 minutes) is less than 90 minutes, the requirement to demonstrate $M_{\max_{ct}}$ less than 90 minutes is satisfied.

ATTACHMENT 2
MAINTAINABILITY DEMONSTRATION ANALYSIS SHEETS

MAINTAINABILITY DEMONSTRATION ANALYSIS

☐ Organizational
☒ Intermediate

SYSTEM AN/TRN-41	DATE 6/1/77	TASK NO. 9	BY:
---------------------	----------------	---------------	-----

MALFUNCTION SYMPTOMS

RT alarm as soon as power turned on

MAINTENANCE STEPS PERFORMED

Replaced in A1 Box

REMARKS

TIME RECORD

Remove from cage 2.2
 Troubleshoot time

Repair Time 2.5

Reassemble 2.0

Alignment & Calibration

Time

TOTAL TIME 6.7

ENGINEERING

GMRogers

QA ENGINEERING

Mr. B. Hunt 6/1/77

AIR FORCE REPRESENTATIVE

John N. Johnson 6/1/77

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/1/77</i>	TASK NO. <i>48</i>	BY:
MALFUNCTION SYMPTOMS <i>IDENT lany on continually</i>			
MAINTENANCE STEPS PERFORMED <i>Replaced A3</i>			
REMARKS		TIME RECORD <div style="display: flex; justify-content: space-between;"> <div><i>Disassembly</i></div> <div><i>2.0</i></div> </div> <div style="display: flex; justify-content: space-between;"> <div>Troubleshoot time</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>Repair Time</div> <div><i>2.7</i></div> </div> <div style="display: flex; justify-content: space-between;"> <div><i>Reassembly</i></div> <div><i>3.0</i></div> </div> <div style="display: flex; justify-content: space-between;"> <div>Alignment & Calibration</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>Time</div> <div>_____</div> </div> <div style="display: flex; justify-content: flex-end; margin-top: 10px;"> <div>TOTAL TIME</div> <div><i>7.7</i></div> </div>	
ENGINEERING <i>JM Rogers</i>	Q A ENGINEERING <i>W. B. Hunt 6/1/77</i>	AIR FORCE REPRESENTATIVE <i>John N. Johnson</i> <i>6-1-77</i>	

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate												
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/1/77</i>	TASK NO. <i>44</i>	BY:												
MALFUNCTION SYMPTOMS <i>RT Alarm</i>															
MAINTENANCE STEPS PERFORMED <i> Checked Monitor Test Points Reply Delay Alarm Low Replaced A4 Replaced A2 Replaced A5 Extended A5 Checked A5 EL Replaced A3 </i>															
REMARKS <i>Problem needs to be included in trouble shooting charts in T.O.</i>		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">TIME RECORD</td> <td></td> </tr> <tr> <td><i>Standard Time</i></td> <td style="text-align: right;"><i>5.0</i></td> </tr> <tr> <td>Troubleshoot time</td> <td style="text-align: right;">_____</td> </tr> <tr> <td>Repair Time</td> <td style="text-align: right;"><i>49.2</i></td> </tr> <tr> <td>Alignment & Calibration Time</td> <td style="text-align: right;">_____</td> </tr> <tr> <td colspan="2" style="text-align: right; padding-top: 10px;"> TOTAL TIME <i>54.2</i> </td> </tr> </table>		TIME RECORD		<i>Standard Time</i>	<i>5.0</i>	Troubleshoot time	_____	Repair Time	<i>49.2</i>	Alignment & Calibration Time	_____	TOTAL TIME <i>54.2</i>	
TIME RECORD															
<i>Standard Time</i>	<i>5.0</i>														
Troubleshoot time	_____														
Repair Time	<i>49.2</i>														
Alignment & Calibration Time	_____														
TOTAL TIME <i>54.2</i>															
ENGINEERING <i>J. Mogen</i>	Q A ENGINEERING <i>M. B. Hunt 6/1/77</i>	AIR FORCE REPRESENTATIVE <i>John H. Johnson 6-1-77</i>													

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/1/77</i>	TASK NO. <i>89</i>	BY:
MALFUNCTION SYMPTOMS <i>RT Alarm</i>			
MAINTENANCE STEPS PERFORMED <i>Checked monitor test points Reply delay delay alarm Check receiver output to A7 and checked output of A7. Relaxed A7</i>			
REMARKS		TIME RECORD	
		Troubleshoot time	<i>5.0</i>
		Repair Time	<i>11.7</i>
		Alignment & Calibration Time	
		TOTAL TIME <i>16.7</i>	
ENGINEERING <i>JM Rogers</i>	Q A ENGINEERING <i>m. B. Hunt</i>	AIR FORCE REPRESENTATIVE <i>Robert M. Long</i>	

Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate										
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/1/77</i>	TASK NO. <i>11</i>	BY:										
MALFUNCTION SYMPTOMS <i>Stays in standby</i>													
MAINTENANCE STEPS PERFORMED: <i>Replaced A1</i>													
REMARKS		<table style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">TIME RECORD</td> </tr> <tr> <td style="width: 70%;">Troubleshoot time</td> <td style="text-align: right;"><i>5.0</i></td> </tr> <tr> <td>Repair Time</td> <td style="text-align: right;"><i>2.2</i></td> </tr> <tr> <td>Alignment & Calibration Time</td> <td style="text-align: right;">_____</td> </tr> <tr> <td style="text-align: right;">TOTAL TIME</td> <td style="text-align: right;"><i>7.2</i></td> </tr> </table>		TIME RECORD		Troubleshoot time	<i>5.0</i>	Repair Time	<i>2.2</i>	Alignment & Calibration Time	_____	TOTAL TIME	<i>7.2</i>
TIME RECORD													
Troubleshoot time	<i>5.0</i>												
Repair Time	<i>2.2</i>												
Alignment & Calibration Time	_____												
TOTAL TIME	<i>7.2</i>												
ENGINEERING <i>JM Roger</i>	Q A ENGINEERING <i>M.B. Hunt</i>	AIR FORCE REPRESENTATIVE <i>Robert M. Gray</i>											

Figure 3.

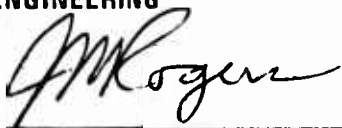
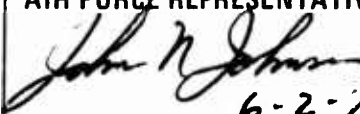
MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM AN/TRN-41	DATE 6/2/77	TASK NO. 104	BY:
MALFUNCTION SYMPTOMS RT Alarm			
MAINTENANCE STEPS PERFORMED Checked Power supply voltages Checked assembly for shorts Replaced A7			
REMARKS		TIME RECORD 5.0 Troubleshoot time _____ Repair Time <u>8.1</u> Alignment & Calibration _____ Time _____ TOTAL TIME <u>13.1</u>	
ENGINEERING 	QA ENGINEERING M. B. Hunt 6/2/77	AIR FORCE REPRESENTATIVE  6-2-77	

Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM <i>AN/TW-41</i>	DATE <i>6/2/77</i>	TASK NO. <i>179</i>	BY:
MALFUNCTION SYMPTOMS <p style="margin-left: 40px;"><i>Antenna did not current limit and did not lock into speed.</i></p>			
MAINTENANCE STEPS PERFORMED <ul style="list-style-type: none"> <i>- OBSERVED ANTENNA NOT LOCKING IN TO SPEED AND ANTENNA ALARM</i> <i>- REMOVED ANT. PEDESTAL - AND REPLACED 2A1 CCA -</i> <i>- REPLACED ANT PEDESTAL -</i> <i>- TESTED</i> 			
REMARKS		TIME RECORD Troubleshoot time <u>1 min</u> Repair Time <u>4 min</u> Alignment & Calibration Time <u>1 min</u> TOTAL TIME <u>6 min</u>	
ENGINEERING <i>BD Day</i>	QA ENGINEERING <i>m. B. Hunt 6/2/77</i>	AIR FORCE REPRESENTATIVE <i>John N. Johnson</i> <i>6-2-77</i>	

Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/2/77</i>	TASK NO. <i>51</i>	BY:
MALFUNCTION SYMPTOMS <i>No lights</i>			
MAINTENANCE STEPS PERFORMED <i>Checked power supply voltages</i> <i>Replaced shorted A3</i>			
REMARKS		TIME RECORD	
		Troubleshoot time	<i>5.0</i>
		Repair Time	<i>2.8</i>
		Alignment & Calibration Time	
		TOTAL TIME <i>7.8</i>	
ENGINEERING <i>JM Rogers</i>	Q A ENGINEERING <i>M. B. [Signature]</i>	AIR FORCE REPRESENTATIVE <i>John N. [Signature]</i> <i>6-2-77</i>	

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/2/77</i>	TASK NO. <i>182</i>	BY:
MALFUNCTION SYMPTOMS <i>Antenna doesn't rotate</i>			
MAINTENANCE STEPS PERFORMED <i>Replaced Antenna speed control - Still failed</i> <i>Replaced motor drive</i>			
REMARKS		TIME RECORD	
		Troubleshoot time _____ Repair Time <u><i>10.0</i></u> Alignment & Calibration _____ Time _____ TOTAL TIME <u><i>10.0</i></u>	
ENGINEERING <i>AM Rogers</i>	QA ENGINEERING <i>m. B. Hunt 6/2/77</i>	AIR FORCE REPRESENTATIVE	

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/2/77</i>	TASK NO. <i>125</i>	BY:
MALFUNCTION SYMPTOMS <i>RT alarm</i>			
MAINTENANCE STEPS PERFORMED <i>Replaced Synthesizer A9</i>			
REMARKS		TIME RECORD Troubleshoot time <i>5.0</i> <i>7.5</i> Repair Time <i>5.2</i> Alignment & Calibration Time _____ TOTAL TIME <i>17.7</i>	
ENGINEERING <i>JM Rogers</i>	Q A ENGINEERING <i>m. B. [signature]</i>	<i>6/2/77</i>	AIR FORCE REPRESENTATIVE <i>John R. Johns</i> <i>6-2-77</i>

Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/2/77</i>	TASK NO. <i>67</i>	BY:
MALFUNCTION SYMPTOMS <i>RT alarm</i>			
MAINTENANCE STEPS PERFORMED: <i>checked voltages</i> <i>checked signals</i> <i>Replaced A4 - still failed</i> <i>Replaced A5</i>			
REMARKS		TIME RECORD Troubleshoot time <u>5.0</u> Repair Time <u>5.8</u> Alignment & Calibration Time _____ TOTAL TIME <u>10.8</u>	
ENGINEERING <i>JM Rozen</i>	Q A ENGINEERING <i>M. B. Lunt</i>	AIR FORCE REPRESENTATIVE <i>John N. Johnson</i> <i>6-2-77</i>	

Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/2/77</i>	TASK NO. <i>154</i>	BY:
MALFUNCTION SYMPTOMS <i>RT alarm</i>			
MAINTENANCE STEPS PERFORMED <i>Checked power supply voltages Replaced Power supply PSI</i>			
REMARKS		TIME RECORD	
		Troubleshoot time	<i>5.0</i>
		Repair Time	<i>13.1</i>
		Alignment & Calibration Time	
		TOTAL TIME <i>23.1</i>	
ENGINEERING <i>J. Rogers</i>	Q A ENGINEERING <i>M. B. Gunt 6/2/77</i>	AIR FORCE REPRESENTATIVE <i>John N. Johnson</i> <i>6-2-77</i>	

Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/2/77</i>	TASK NO. <i>78</i>	BY:
MALFUNCTION SYMPTOMS <i>RT alarm</i>			
MAINTENANCE STEPS PERFORMED: <i>check voltages and alarm test points</i> <i>Replaced A5 - still fails</i> <i>check signals to & from A5</i> <i>Replaced A6</i>			
REMARKS		TIME RECORD	
		<i>5.0</i>	
		Troubleshoot time	
		<i>8.0</i>	
		Repair Time	
Alignment & Calibration			
Time			
		TOTAL TIME <i>13.0</i>	
ENGINEERING <i>JM Rogers</i>	QA ENGINEERING <i>m. B. Hunt 6/2/77</i>	AIR FORCE REPRESENTATIVE <i>John N. Johnson 6-2-77</i>	

Figure 3.


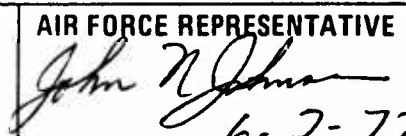
MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM AN/TRN-41	DATE 6/2/77	TASK NO. 62	BY:
MALFUNCTION SYMPTOMS RT alarm			
MAINTENANCE STEPS PERFORMED: Checked squitter count - Readjusted to check Replaced A5 Adjusted squitter count Tested using interrogation and adjusted A5			
REMARKS		TIME RECORD 5.0 Troubleshoot time _____ Repair Time <u>8.9</u> Alignment & Calibration _____ Time _____ TOTAL TIME <u>13.9</u>	
ENGINEERING 	Q A ENGINEERING Mr. B. Lunt 6/2/77	AIR FORCE REPRESENTATIVE  6-2-77	

Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/2/77</i>	TASK NO. <i>87</i>	BY:
MALFUNCTION SYMPTOMS <i>RT Alarm</i>			
MAINTENANCE STEPS PERFORMED: <i>checked voltages</i> <i>checked signals</i> <i>replaced AT</i> <i>aligned AT</i>			
REMARKS		TIME RECORD	
		Troubleshoot time	<i>5.0</i> <i>7.2</i>
		Repair Time	
		Alignment & Calibration Time	<i>1.0</i>
		TOTAL TIME <i>13.2</i>	
ENGINEERING <i>JMRogers</i>	QA ENGINEERING <i>M. B. Hunt 6/2/77</i>	AIR FORCE REPRESENTATIVE <i>John R. [Signature]</i> <i>6/2/77</i>	

Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM AN/TRN-41	DATE 6/2/77	TASK NO. 24	BY:
MALFUNCTION SYMPTOMS RT Alarm			
MAINTENANCE STEPS PERFORMED Replaced A4 Replaced A2 Adjustment of A2			
REMARKS		TIME RECORD	
		Troubleshoot time	5.0 5.2
		Repair Time	
		Alignment & Calibration Time	2.4
		TOTAL TIME	
ENGINEERING JMR	Q A ENGINEERING M.B. Hunt 6/2/77	AIR FORCE REPRESENTATIVE John D. Schuman 6-2-77	

Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate										
SYSTEM AN/TRN-41	DATE 6/2/77	TASK NO. 68	BY:										
MALFUNCTION SYMPTOMS RT Alarm													
MAINTENANCE STEPS PERFORMED Checked detected RF - no squitter Extended AS Checked signals on AS board Replaced AS Adjustments													
REMARKS		<table style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: left; padding: 5px;">TIME RECORD</td> </tr> <tr> <td style="width: 70%; padding: 5px;">Troubleshoot time</td> <td style="width: 30%; padding: 5px; text-align: right;">5.0 <u>7.4</u></td> </tr> <tr> <td style="padding: 5px;">Repair Time</td> <td style="padding: 5px; text-align: right;">1.0 <u>1.0</u></td> </tr> <tr> <td style="padding: 5px;">Alignment & Calibration Time</td> <td style="padding: 5px; text-align: right;">2.2 <u>2.2</u></td> </tr> <tr> <td colspan="2" style="padding: 5px; text-align: right;"> TOTAL TIME <u>15.6</u> </td> </tr> </table>		TIME RECORD		Troubleshoot time	5.0 <u>7.4</u>	Repair Time	1.0 <u>1.0</u>	Alignment & Calibration Time	2.2 <u>2.2</u>	TOTAL TIME <u>15.6</u>	
TIME RECORD													
Troubleshoot time	5.0 <u>7.4</u>												
Repair Time	1.0 <u>1.0</u>												
Alignment & Calibration Time	2.2 <u>2.2</u>												
TOTAL TIME <u>15.6</u>													
ENGINEERING <i>JM Rogers</i>	Q A ENGINEERING <i>m. B. Hunt</i> 6/2/77	AIR FORCE REPRESENTATIVE <i>John D. Johnson</i> 6/2/77											


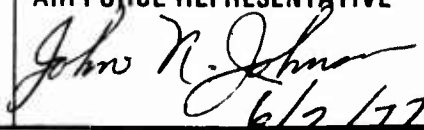
Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/2/77</i>	TASK NO. <i>20</i>	BY:
MALFUNCTION SYMPTOMS <i>RT alarm</i>			
MAINTENANCE STEPS PERFORMED <i>RCVR squitter alarm</i> <i>Replaced AZ</i>			
REMARKS		TIME RECORD	
		Troubleshoot time	<i>5.0</i> <i>9.5</i>
		Repair Time	<i>.5</i>
		Alignment & Calibration Time	<i>2.6</i>
		TOTAL TIME <i>17.6</i>	
ENGINEERING <i>J. Rogers</i>	Q A ENGINEERING <i>Mr. B. Hunt 6/2/77</i>	AIR FORCE REPRESENTATIVE <i>John N. Johnson</i> <i>6/2/77</i>	

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/2/77</i>	TASK NO. <i>166</i>	BY:
MALFUNCTION SYMPTOMS <i>Known bad condition in antenna not detected by RT.</i>			
MAINTENANCE STEPS PERFORMED <i>Disconnected RF cable - no VSWR alarm</i> <i>Replaced A2 - still failed</i> <i>Extended A2</i>			
REMARKS		TIME RECORD Troubleshoot time <u><i>5.0</i></u> <u><i>7.9</i></u> Repair Time <u><i>10.2</i></u> Alignment & Calibration <u> </u> Time TOTAL TIME <u><i>23.1</i></u>	
ENGINEERING <i>JMR</i>	Q A ENGINEERING <i>W.B. [signature]</i>	AIR FORCE REPRESENTATIVE <i>John [signature]</i>	

Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/2/77</i>	TASK NO. <i>172</i>	BY:
MALFUNCTION SYMPTOMS <i>No ON AIR lamp</i>			
MAINTENANCE STEPS PERFORMED <i>Replaced lamp</i>			
REMARKS		TIME RECORD	
		Troubleshoot time _____	
		Repair Time <u><i>1.6</i></u>	
		Alignment & Calibration Time _____	
		TOTAL TIME <u><i>1.6</i></u>	
ENGINEERING <i>JM Rogers</i>	QA ENGINEERING <i>m. B. Hunt 6/2/77</i>	AIR FORCE REPRESENTATIVE <i>John N. Johnson</i> <i>6/2/77</i>	

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate										
SYSTEM AN/TRN-41	DATE 6/2/77	TASK NO. 2	BY:										
MALFUNCTION SYMPTOMS Standby lamp does not illuminate													
MAINTENANCE STEPS PERFORMED Check lamps. replace standby lamp - still fail replace A1													
REMARKS		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">TIME RECORD</td> <td style="width: 40%; text-align: right;">5.0</td> </tr> <tr> <td>Troubleshoot time</td> <td style="text-align: right;">_____</td> </tr> <tr> <td>Repair Time</td> <td style="text-align: right;">1.3</td> </tr> <tr> <td>Alignment & Calibration Time</td> <td style="text-align: right;">_____</td> </tr> <tr> <td colspan="2" style="text-align: right; padding-top: 10px;"> TOTAL TIME 6.3 </td> </tr> </table>		TIME RECORD	5.0	Troubleshoot time	_____	Repair Time	1.3	Alignment & Calibration Time	_____	TOTAL TIME 6.3	
TIME RECORD	5.0												
Troubleshoot time	_____												
Repair Time	1.3												
Alignment & Calibration Time	_____												
TOTAL TIME 6.3													
ENGINEERING 	QA ENGINEERING M.B. Lunt 6/2/77	AIR FORCE REPRESENTATIVE  6/2/77											

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/2/77</i>	TASK NO. <i>47</i>	BY:
MALFUNCTION SYMPTOMS: <i>Continuous IDENT Lamp</i>			
MAINTENANCE STEPS PERFORMED <i>Replaced A3</i>			
REMARKS		TIME RECORD	
		Troubleshoot time	<i>5.0</i>
		Repair Time	<i>2.9</i>
		Alignment & Calibration Time	<i>7</i>
		TOTAL TIME <i>7.9</i>	
ENGINEERING <i>JM Rogers</i>	QA ENGINEERING <i>M. B. Hunt 6/2/77</i>	AIR FORCE REPRESENTATIVE <i>John R. Johnson 6/2/77</i>	

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/2/77</i>	TASK NO. <i>69</i>	BY:
MALFUNCTION SYMPTOMS <i>RT alarm</i>			
MAINTENANCE STEPS PERFORMED <i>checked alarm test points - Pulse rate alarm</i> <i>Replaced AS</i>			
REMARKS		TIME RECORD Troubleshoot time <u><i>5.0</i></u> <u><i>3.8</i></u> Repair Time <u><i>.5</i></u> Alignment & Calibration Time <u><i>2.0</i></u> TOTAL TIME <u><i>11.3</i></u>	
ENGINEERING <i>JM Rogan</i>	QA ENGINEERING <i>m. B. Hunt 6/2/77</i>	AIR FORCE REPRESENTATIVE <i>John N. Johnson 6/2/77</i>	

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/2/77</i>	TASK NO. <i>26</i>	BY:
MALFUNCTION SYMPTOMS <i>RT Alarm</i>			
MAINTENANCE STEPS PERFORMED <i>Replaced A1</i> <i>Replaced A2</i>			
REMARKS		TIME RECORD	
		<i>Troubleshoot time</i> <u><i>5.0</i></u>	
		<i>Repair Time</i> <u><i>2.7</i></u>	
		<i>Alignment & Calibration</i> <u><i>.5</i></u>	
		<i>Time</i> <u><i>3.3</i></u>	
		TOTAL TIME <u><i>11.5</i></u>	
ENGINEERING <i>J. Rogers</i>	QA ENGINEERING <i>M. B. Hunt 6/2/77</i>	AIR FORCE REPRESENTATIVE <i>John H. Johnson</i> <i>6/2/77</i>	

Figure 3.




MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate										
SYSTEM AN/TRN-41	DATE 6/2/77	TASK NO. 155	BY:										
MALFUNCTION SYMPTOMS RT alarm													
MAINTENANCE STEPS PERFORMED Checked voltages - $\pm 15V$ missing unplugged circuit cards - still missing unplugged output of power supply $\pm 15V$ missing Replaced power supply.													
REMARKS		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">TIME RECORD</td> <td style="width: 40%; text-align: right;">5.0</td> </tr> <tr> <td>Troubleshoot time</td> <td style="text-align: right;">5.4</td> </tr> <tr> <td>Repair Time</td> <td style="text-align: right;">9.5</td> </tr> <tr> <td>Alignment & Calibration Time</td> <td style="text-align: right;">_____</td> </tr> <tr> <td style="text-align: right;">TOTAL TIME</td> <td style="text-align: right;">19.9</td> </tr> </table>		TIME RECORD	5.0	Troubleshoot time	5.4	Repair Time	9.5	Alignment & Calibration Time	_____	TOTAL TIME	19.9
TIME RECORD	5.0												
Troubleshoot time	5.4												
Repair Time	9.5												
Alignment & Calibration Time	_____												
TOTAL TIME	19.9												
ENGINEERING 	Q A ENGINEERING  6/2/77	AIR FORCE REPRESENTATIVE  6/2/77											

Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/3/77</i>	TASK NO. <i>120</i>	BY:
MALFUNCTION SYMPTOMS <i>RT Alarm</i>			
MAINTENANCE STEPS PERFORMED <i>checked voltages</i> <i>checked alarm test points</i> <i>rechecked voltages on synthesizer</i> <i>Replaced synthesizer A9</i>			
REMARKS		TIME RECORD	
		Troubleshoot time	<i>5.0</i> <i>5.3</i>
		Repair Time	<i>5.2</i>
		Alignment & Calibration Time	
		TOTAL TIME <i>15.5</i>	
ENGINEERING <i>JM Rager</i>	QA ENGINEERING <i>W. B. Hunt 6/3/77</i>	AIR FORCE REPRESENTATIVE <i>John H. Johnson</i> <i>6/3/77</i>	

Figure 3.


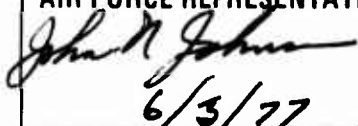
MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM AN/TRN-41	DATE 6/3/77	TASK NO. 18	BY:
MALFUNCTION SYMPTOMS RT alarm			
MAINTENANCE STEPS PERFORMED checked voltages checked alarm test points Replaced A2 checked alarm circuits			
REMARKS		TIME RECORD Troubleshoot time <u>5.0</u> Repair Time _____ Alignment & Calibration _____ Time _____ TOTAL TIME <u>10.7</u>	
ENGINEERING 	QA ENGINEERING Mr. B. Gunt 6/3/77	AIR FORCE REPRESENTATIVE  6/3/77	

Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/3/77</i>	TASK NO. <i>12</i>	BY:
MALFUNCTION SYMPTOMS <i>No lights</i>			
MAINTENANCE STEPS PERFORMED <i>Checked voltages replaced A1</i>			
REMARKS		TIME RECORD Troubleshoot time <u><i>5.0</i></u> <u><i>2.0</i></u> Repair Time <u><i>1.1</i></u> Alignment & Calibration <u> </u> Time <u> </u> TOTAL TIME <u><i>8.1</i></u>	
ENGINEERING <i>J. M. Rogers</i>	QA ENGINEERING <i>M. B. Hunt 6/3/77</i>	AIR FORCE REPRESENTATIVE <i>John H. Johnson 6/3/77</i>	

Figure 3.

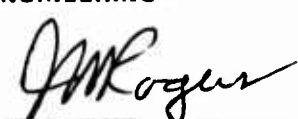
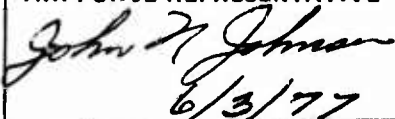
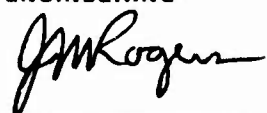
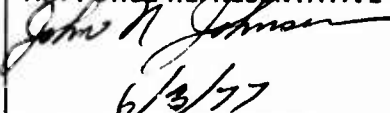

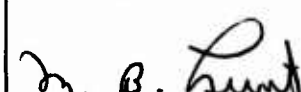

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM AN/TRN-41	DATE 6/3/77	TASK NO. 61	BY:
MALFUNCTION SYMPTOMS RT ALARM			
MAINTENANCE STEPS PERFORMED: CHECKED VOLTAGES Checked count on AS card Removed and replaced AS aligned + calibrated AS			
REMARKS		TIME RECORD Troubleshoot time <u>5.0</u> <u>3.5</u> Repair Time <u>.5</u> Alignment & Calibration <u>2.4</u> Time TOTAL TIME <u>11.4</u>	
ENGINEERING 	QA ENGINEERING W. B. Hunt 6/3/77	AIR FORCE REPRESENTATIVE  6/3/77	

Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate										
SYSTEM AN/TRN-41	DATE 6/3/77	TASK NO. 141	BY:										
MALFUNCTION SYMPTOMS RT Alarm													
MAINTENANCE STEPS PERFORMED Checked alarm test points - Peak power alarm Replaced AZ - Failed Replaced power amplifier AK1 Checked peak power													
REMARKS		TIME RECORD <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">Troubleshoot time</td> <td style="width: 20%; text-align: right;">5.0</td> </tr> <tr> <td>Repair Time</td> <td style="text-align: right;">5.3</td> </tr> <tr> <td>Alignment & Calibration</td> <td style="text-align: right;">9.6</td> </tr> <tr> <td>Time</td> <td style="text-align: right;">1.2</td> </tr> <tr> <td colspan="2" style="border-top: 1px solid black; padding-top: 5px;"> TOTAL TIME 21.1 </td> </tr> </table>		Troubleshoot time	5.0	Repair Time	5.3	Alignment & Calibration	9.6	Time	1.2	TOTAL TIME 21.1	
Troubleshoot time	5.0												
Repair Time	5.3												
Alignment & Calibration	9.6												
Time	1.2												
TOTAL TIME 21.1													
ENGINEERING 	QA ENGINEERING M. B. Hunt 6/3/77	AIR FORCE REPRESENTATIVE  6/3/77											

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM <div style="text-align: center;">AN/TRN-41</div>	DATE <div style="text-align: center;">6/3/77</div>	TASK NO. <div style="text-align: center;">57</div>	BY:
MALFUNCTION SYMPTOMS <div style="text-align: center;">RT ALARM</div>			
MAINTENANCE STEPS PERFORMED: CHECKED VOLTAGES REPLACED AS PC BOARD ASSY. CHECKED ALARM CIRCUITS.			
REMARKS		TIME RECORD Troubleshoot time <u>5.0</u> <u>4.2</u> Repair Time _____ Alignment & Calibration _____ Time _____ TOTAL TIME <u>9.2</u>	
ENGINEERING <div style="text-align: center;"></div>	QA ENGINEERING <div style="text-align: center;"> 6/3/77</div>	AIR FORCE REPRESENTATIVE <div style="text-align: center;"> 6/3/77</div>	

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM AN / TRN - W1	DATE 6/3/77	TASK NO. 110	BY:
MALFUNCTION SYMPTOMS RT ALARM			
MAINTENANCE STEPS PERFORMED Checked ^{RT} Alarms on A2 Replaced A2 Board Changed to Original A2 Board Replaced Receiver A8 Check Operation and Alignment			
REMARKS		TIME RECORD	
		Troubleshoot time	5.0 4.0
		Repair Time	7.4
		Alignment & Calibration Time	2.2
		TOTAL TIME	
ENGINEERING <i>SKomell</i>	QA ENGINEERING <i>m. B. Hunt</i> 6/3/77	AIR FORCE REPRESENTATIVE <i>John H. Johnson</i> 6/3/77	

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM AN/TN-41	DATE 6 / 3 / 77	TASK NO. 98	BY:
MALFUNCTION SYMPTOMS ET ALARM			
MAINTENANCE STEPS PERFORMED: CHECKED VOLTAGES REPLACED A7 P.C. BOARD ASSY MADE ALIGNMENT & CALIBRATION CHECKED ALARMS			
REMARKS		TIME RECORD	5.0
		Troubleshoot time	2.0
		Repair Time	1.5
		Alignment & Calibration Time	2.5
		TOTAL TIME	
ENGINEERING <i>[Signature]</i>	Q A ENGINEERING m. B. Hunt 6/3/77	AIR FORCE REPRESENTATIVE <i>[Signature]</i> 6/3/77	

Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>3 JUN 77</i>	TASK NO. <i>86</i>	BY:
MALFUNCTION SYMPTOMS <i>RT ALARM</i>			
MAINTENANCE STEPS PERFORMED <i>check Alarm Test Points</i> <i>Check Signal Path for Replies</i> <i>Replace A7</i> <i>Align & check operation of A7</i>			
REMARKS		TIME RECORD	<i>5.0</i>
		Troubleshoot time	<i>4.5</i>
		Repair Time	<i>0.5</i>
		Alignment & Calibration Time	<i>3.5</i>
		TOTAL TIME	
ENGINEERING <i>[Signature]</i> <i>3 JUN 77</i>	Q A ENGINEERING <i>M. B. Lunt</i> <i>6/3/77</i>	AIR FORCE REPRESENTATIVE <i>John N. Johnson</i> <i>6/3/77</i>	


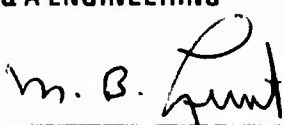

Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate										
SYSTEM AN/TEN-41	DATE 6/3/77	TASK NO. 127	BY:										
MALFUNCTION SYMPTOMS <div style="text-align: center; font-size: 1.2em; margin-top: 10px;">RT ALARM</div>													
MAINTENANCE STEPS PERFORMED: <div style="margin-top: 10px;"> <p>Checked DET RF</p> <p>Checked Squitter</p> <p>Checked Synth Alarm Test Pt.</p> <p>Found No +15V on Synth</p> <p>Replaced Synth AG</p> <p>Checked operation</p> </div>													
REMARKS		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">TIME RECORD</td> <td style="width: 40%; text-align: right;">5.0</td> </tr> <tr> <td>Troubleshoot time</td> <td style="text-align: right;"><u>2.3</u></td> </tr> <tr> <td>Repair Time</td> <td style="text-align: right;"><u>5.2</u></td> </tr> <tr> <td>Alignment & Calibration Time</td> <td style="text-align: right;"><u>.5</u></td> </tr> <tr> <td colspan="2" style="text-align: right; padding-top: 20px;"> TOTAL TIME <u>13.0</u> </td> </tr> </table>		TIME RECORD	5.0	Troubleshoot time	<u>2.3</u>	Repair Time	<u>5.2</u>	Alignment & Calibration Time	<u>.5</u>	TOTAL TIME <u>13.0</u>	
TIME RECORD	5.0												
Troubleshoot time	<u>2.3</u>												
Repair Time	<u>5.2</u>												
Alignment & Calibration Time	<u>.5</u>												
TOTAL TIME <u>13.0</u>													
ENGINEERING <div style="text-align: center; margin-top: 10px;"> </div>	QA ENGINEERING <div style="text-align: center; margin-top: 10px;"> </div>	AIR FORCE REPRESENTATIVE <div style="text-align: center; margin-top: 10px;"> </div>											

Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate										
SYSTEM	DATE	TASK NO. <div style="text-align: center; font-size: 1.2em;">134</div>	BY:										
MALFUNCTION SYMPTOMS <div style="text-align: center; font-size: 1.2em;">RT ALARM</div>													
MAINTENANCE STEPS PERFORMED <div style="font-family: cursive;"> Check Supply Voltages No Det RF Synth has no -5.2v. Replace Synthesizer A9 Check Operation </div>													
REMARKS		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">TIME RECORD</td> <td style="width: 30%; text-align: right;">5.0</td> </tr> <tr> <td>Troubleshoot time</td> <td style="text-align: right;">2.3</td> </tr> <tr> <td>Repair Time</td> <td style="text-align: right;">5.2</td> </tr> <tr> <td>Alignment & Calibration Time</td> <td style="text-align: right;">.5</td> </tr> <tr> <td style="text-align: right;">TOTAL TIME</td> <td style="text-align: right;">13.0</td> </tr> </table>		TIME RECORD	5.0	Troubleshoot time	2.3	Repair Time	5.2	Alignment & Calibration Time	.5	TOTAL TIME	13.0
TIME RECORD	5.0												
Troubleshoot time	2.3												
Repair Time	5.2												
Alignment & Calibration Time	.5												
TOTAL TIME	13.0												
ENGINEERING	QA ENGINEERING	AIR FORCE REPRESENTATIVE											
<div style="font-family: cursive;"> R. B. Smith 3 Jun 77 </div>	<div style="font-family: cursive;"> M. B. Smith 6/3/77 </div>	<div style="font-family: cursive;"> John N. Johnson 6/3/77 </div>											

Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate										
SYSTEM AN/TEN-41	DATE 6/3/77	TASK NO. 74	BY:										
MALFUNCTION SYMPTOMS <div style="text-align: center; font-family: cursive;"> ANTENNA ROTATION NO LAMPS ON </div>													
MAINTENANCE STEPS PERFORMED <div style="font-family: cursive;"> Checked Lamps Test Checked +5V. Removed all PC Boards Reinserted Boards A1 - A5 Replace A5 </div>													
REMARKS		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">TIME RECORD</td> <td style="width: 40%; text-align: right;">5.0</td> </tr> <tr> <td>Troubleshoot time</td> <td style="text-align: right;"><u>1.0</u></td> </tr> <tr> <td>Repair Time</td> <td style="text-align: right;"><u>.5</u></td> </tr> <tr> <td>Alignment & Calibration Time</td> <td style="text-align: right;"><u>2.4</u></td> </tr> <tr> <td>TOTAL TIME</td> <td style="text-align: right;"><u>8.9</u></td> </tr> </table>		TIME RECORD	5.0	Troubleshoot time	<u>1.0</u>	Repair Time	<u>.5</u>	Alignment & Calibration Time	<u>2.4</u>	TOTAL TIME	<u>8.9</u>
TIME RECORD	5.0												
Troubleshoot time	<u>1.0</u>												
Repair Time	<u>.5</u>												
Alignment & Calibration Time	<u>2.4</u>												
TOTAL TIME	<u>8.9</u>												
ENGINEERING <div style="font-family: cursive;">  E. J. Smith </div>	QA ENGINEERING <div style="font-family: cursive;">  M. B. Hunt </div>	AIR FORCE REPRESENTATIVE <div style="font-family: cursive;">  John H. Johnson </div>											

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate										
SYSTEM <i>AN/TRN-41</i>	DATE <i>Jun 3, 1977</i>	TASK NO. <i>4</i>	BY:										
MALFUNCTION SYMPTOMS <p style="text-align: center; font-size: 1.2em;"><i>No INDICATION OF ANTENNA FAILURE</i></p>													
MAINTENANCE STEPS PERFORMED <p style="text-align: center; font-size: 1.2em;"><i>Checked ANT ALARM Lamp</i></p> <p style="text-align: center; font-size: 1.2em;"><i>Replaced A1 PC Board</i></p>													
REMARKS		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">TIME RECORD</td> <td style="width: 40%; text-align: right;"><i>5.0</i></td> </tr> <tr> <td>Troubleshoot time</td> <td style="text-align: right;"><u><i>1.25</i></u></td> </tr> <tr> <td>Repair Time</td> <td style="text-align: right;"><u><i>1.1</i></u></td> </tr> <tr> <td>Alignment & Calibration Time</td> <td style="text-align: right;"><u> </u></td> </tr> <tr> <td style="text-align: right;">TOTAL TIME</td> <td style="text-align: right;"><u><i>7.35</i></u></td> </tr> </table>		TIME RECORD	<i>5.0</i>	Troubleshoot time	<u><i>1.25</i></u>	Repair Time	<u><i>1.1</i></u>	Alignment & Calibration Time	<u> </u>	TOTAL TIME	<u><i>7.35</i></u>
TIME RECORD	<i>5.0</i>												
Troubleshoot time	<u><i>1.25</i></u>												
Repair Time	<u><i>1.1</i></u>												
Alignment & Calibration Time	<u> </u>												
TOTAL TIME	<u><i>7.35</i></u>												
ENGINEERING	Q A ENGINEERING	AIR FORCE REPRESENTATIVE											
<i>[Signature]</i> 3 Jun 77	<i>M. B. Hunt</i>	<i>[Signature]</i>											

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate										
SYSTEM <i>AN/ARN-41</i>	DATE <i>3 JUN 77</i>	TASK NO. <i>83</i>	BY:										
MALFUNCTION SYMPTOMS <div style="margin-left: 40px;"> <i>ANTENNA Rotates</i> <i>NO LAMPS ON</i> </div>													
MAINTENANCE STEPS PERFORMED <div style="margin-left: 40px;"> <i>Checked Lamps test</i> <i>Removed PC boards</i> <i>Reinserted one at a time</i> <i>Replaced A6</i> </div>													
REMARKS		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">TIME RECORD</td> <td style="width: 30%; text-align: right;"><i>5.0</i></td> </tr> <tr> <td>Troubleshoot time</td> <td style="text-align: right;"><i>1.5</i></td> </tr> <tr> <td>Repair Time</td> <td style="text-align: right;"><i>1.7</i></td> </tr> <tr> <td>Alignment & Calibration Time</td> <td style="text-align: right;">_____</td> </tr> <tr> <td colspan="2" style="text-align: right; padding-top: 10px;">TOTAL TIME <i>7.2</i></td> </tr> </table>		TIME RECORD	<i>5.0</i>	Troubleshoot time	<i>1.5</i>	Repair Time	<i>1.7</i>	Alignment & Calibration Time	_____	TOTAL TIME <i>7.2</i>	
TIME RECORD	<i>5.0</i>												
Troubleshoot time	<i>1.5</i>												
Repair Time	<i>1.7</i>												
Alignment & Calibration Time	_____												
TOTAL TIME <i>7.2</i>													
ENGINEERING <i>Donnell 3 Jun 77</i>	QA ENGINEERING <i>M.B. Funt 4/3/77</i>	AIR FORCE REPRESENTATIVE <i>Alan A. H...</i>											

Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate										
SYSTEM <i>AN/TEN-41</i>	DATE <i>6/3/77</i>	TASK NO. <i>30</i>	BY:										
MALFUNCTION SYMPTOMS <div style="font-size: 1.2em; margin-left: 40px;"><i>RT Alarm</i></div>													
MAINTENANCE STEPS PERFORMED <div style="font-size: 1.2em; margin-left: 40px;"> <i>Checked DETECTED RF</i> <i>Checked Signal path for Replies</i> <i>Checked Alarm test points</i> <i>Replaced A2</i> <i>Align A2 board</i> </div>													
REMARKS		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">TIME RECORD</td> <td style="width: 30%; text-align: right;"><i>5.0</i></td> </tr> <tr> <td>Troubleshoot time</td> <td style="text-align: right;"><i>3.7</i></td> </tr> <tr> <td>Repair Time</td> <td style="text-align: right;"><i>.5</i></td> </tr> <tr> <td>Alignment & Calibration Time</td> <td style="text-align: right;"><i>2.5</i></td> </tr> <tr> <td colspan="2" style="text-align: right; padding-top: 10px;">TOTAL TIME <i>11.7</i></td> </tr> </table>		TIME RECORD	<i>5.0</i>	Troubleshoot time	<i>3.7</i>	Repair Time	<i>.5</i>	Alignment & Calibration Time	<i>2.5</i>	TOTAL TIME <i>11.7</i>	
TIME RECORD	<i>5.0</i>												
Troubleshoot time	<i>3.7</i>												
Repair Time	<i>.5</i>												
Alignment & Calibration Time	<i>2.5</i>												
TOTAL TIME <i>11.7</i>													
ENGINEERING	Q A ENGINEERING	AIR FORCE REPRESENTATIVE											
<i>[Signature]</i> 3 Jun 77	<i>M. B. Gunt</i> 6/3/77	<i>[Signature]</i>											

Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>3 JUN 77</i>	TASK NO. <i>109</i>	BY:
MALFUNCTION SYMPTOMS <i>RT ALARM</i>			
MAINTENANCE STEPS PERFORMED <i>Checked Voltages</i> <i>Checked Alarms</i> <i>Replaced A2</i> <i>Returned Original A2</i> <i>Replaced AB</i> <i>Align & Calibrate</i>			
REMARKS		TIME RECORD	
		Troubleshoot time	<u><i>5.0</i></u>
		Repair Time	<u><i>4.0</i></u>
		Alignment & Calibration Time	<u><i>7.4</i></u>
			<u><i>2.2</i></u>
		TOTAL TIME <u><i>18.6</i></u>	
ENGINEERING <i>S. Romell</i> <i>3 Jun 77</i>	QA ENGINEERING <i>M. B. (Punt)</i> <i>6/3/77</i>	AIR FORCE REPRESENTATIVE <i>John N. Johnson</i> <i>6/3/77</i>	

Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS:			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>3 JUN 77</i>	TASK NO. <i>183</i>	BY:
MALFUNCTION SYMPTOMS <p style="text-align: center;"><i>ANTENNA ALARM</i> <i>No Antenna Rotation</i></p>			
MAINTENANCE STEPS PERFORMED <i>Found No Antenna Rotation</i> <i>Opened Antenna IAI Assembly</i> <i>Replaced IAI Assembly</i> <i>Replaced Ant Motor Drive Assembly</i> <i>Replace motor Brushes</i> <i>Install original IAI & Motor Drive Assembly</i> <i>checked Ant speed</i>			
REMARKS		TIME RECORD	<i>5.0</i>
		Troubleshoot time	<i>7.2</i>
		Repair Time	<i>14.0</i>
		Alignment & Calibration Time	<i>.8</i>
		TOTAL TIME <i>27.0</i>	
ENGINEERING <i>W. K. Kinnell</i> <i>3 JUN 77</i>	Q A ENGINEERING <i>M. B. Hunt</i> <i>6/4/77</i>	AIR FORCE REPRESENTATIVE <i>John N. Johnson</i> <i>6/3/77</i>	

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate										
SYSTEM <i>AN/TRN-41</i>	DATE <i>3 Jun 77</i>	TASK NO. <i>149</i>	BY:										
MALFUNCTION SYMPTOMS <div style="text-align: center; font-size: 1.2em;"><i>RT ALARM</i></div>													
MAINTENANCE STEPS PERFORMED <div style="text-align: center;"> <i>Checked for Detected RF</i> <i>Checked +50VDC</i> <i>Checked Detected RF at CR1</i> <i>Measured +24VDC at Gated Amplifier</i> <i>Replace gated amplifier</i> </div>													
REMARKS		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">TIME RECORD</td> <td style="width: 40%; text-align: right;"><i>5.0</i></td> </tr> <tr> <td>Troubleshoot time</td> <td style="text-align: right;"><i>5.0</i></td> </tr> <tr> <td>Repair Time</td> <td style="text-align: right;"><i>28.0</i></td> </tr> <tr> <td>Alignment & Calibration Time</td> <td style="text-align: right;"><i>1.5</i></td> </tr> <tr> <td colspan="2" style="text-align: right; padding-top: 10px;">TOTAL TIME <i>39.5</i></td> </tr> </table>		TIME RECORD	<i>5.0</i>	Troubleshoot time	<i>5.0</i>	Repair Time	<i>28.0</i>	Alignment & Calibration Time	<i>1.5</i>	TOTAL TIME <i>39.5</i>	
TIME RECORD	<i>5.0</i>												
Troubleshoot time	<i>5.0</i>												
Repair Time	<i>28.0</i>												
Alignment & Calibration Time	<i>1.5</i>												
TOTAL TIME <i>39.5</i>													
ENGINEERING <i>SK Somrell</i> <i>3 Jun 77</i>	QA ENGINEERING <i>M. B. Hunt</i> <i>6/3/77</i>	AIR FORCE REPRESENTATIVE <i>John H. Johnson</i> <i>6/3/77</i>											

Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM AN/TRN-41	DATE 6/3/77	TASK NO. 128	BY:
MALFUNCTION SYMPTOMS ANTENNA ALARM			
MAINTENANCE STEPS PERFORMED CONNECTED RT TO DUMMY LOAD CHECKED ANTENNA TRIGGERS CHECKED ANT SPEED ALARM TEST POINT Replaced A1 CIRCUIT CARD ASSEMBLY IN ANTENNA			
REMARKS		TIME RECORD Troubleshoot time <u>5.5</u> Repair Time <u>5.0</u> Alignment & Calibration <u>1.5</u> Time <div style="text-align: right;">TOTAL TIME <u>12.0</u></div>	
ENGINEERING <i>D. K. Howell</i> 3 Jun 77	Q A ENGINEERING <i>M. B. Hunt</i> 6/3/77	AIR FORCE REPRESENTATIVE <i>John W. Johnson</i> 6/3/77	

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>3 JUN 77</i>	TASK NO. <i>168</i>	BY:
MALFUNCTION SYMPTOMS <i>POOR OR NO DME RESPONSE</i>			
MAINTENANCE STEPS PERFORMED: <i>Checked Ferris Test Point on Receiver</i> <i>checked Voltages on Receiver</i> <i>APPLIED RF INTERROGATION DIRECTLY TO RECEIVER INPUT.</i> <i>Replaced IAS CCA.</i> <i>APPLY INTRG AT ISOLATOR AT4 INPUT</i> <i>APPLY INTRG AT YIG INPUT</i> <i>REPLACE YIG</i>			
REMARKS		TIME RECORD	<i>5.0</i>
		Troubleshoot time	<i>6.0</i>
		Repair Time	<i>12.0</i>
		Alignment & Calibration Time	<i>1.6</i>
		TOTAL TIME	
ENGINEERING <i>[Signature]</i> <i>3 JUN 77</i>	Q A ENGINEERING <i>M.B. Hunt</i> <i>6/3/77</i>	AIR FORCE REPRESENTATIVE <i>John N. Johnson</i> <i>6/3/77</i>	

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>3 JUN 77</i>	TASK NO. <i>52</i>	BY:
MALFUNCTION SYMPTOMS <i>RT ALARM</i>			
MAINTENANCE STEPS PERFORMED <i>CHECK POWER SUPPLY VOLTAGES</i> <i>CHECK ALARM TEST POINTS</i> <i>REPLACE A4</i>			
REMARKS		TIME RECORD	
		Troubleshoot time <u><i>5.0</i></u>	
		Repair Time <u><i>3.7</i></u>	
		Alignment & Calibration Time <u><i>.5</i></u>	
		TOTAL TIME <u><i>8.7</i></u>	
ENGINEERING <i>W. K. Romell</i> <i>3 JUN 77</i>	Q A ENGINEERING <i>M. B. Hunt</i> <i>6/3/77</i>	AIR FORCE REPRESENTATIVE <i>John N. Johnson</i> <i>6/3/77</i>	

Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-14</i>	DATE <i>6 Jun 77</i>	TASK NO. <i>143</i>	BY:
MALFUNCTION SYMPTOMS <i>NO LAMPS</i>			
MAINTENANCE STEPS PERFORMED <i> Checked Power supply voltages Un-seated 7 PC cards Re-seated 7 PC cards Checked output of power supply with load disconnected Removed Synthesizer load from power supplies check Crowbar for short Checked YIG Filter for short Disconnected Power Amplifier load. Replace Power Amplifier IAR1 </i>			
REMARKS		TIME RECORD	<i>5.0</i>
		Troubleshoot time	<i>11.3</i>
		Repair Time	<i>5.7</i>
		Alignment & Calibration Time	<i>1.0</i>
		TOTAL TIME <i>23.0</i>	
ENGINEERING <i>[Signature]</i> <i>6 Jun 77</i>	Q A ENGINEERING <i>Mr. B. Hunt</i> <i>6/6/77</i>	AIR FORCE REPRESENTATIVE <i>[Signature]</i> <i>6/6/77</i>	

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM AN/TRN-26	DATE 6 JUNE 1977	TASK NO 167	BY:
MALFUNCTION SYMPTOMS ANT ALARM			
MAINTENANCE STEPS PERFORMED CHECKED SIGNAL PATH CHECKED DETECTED RF CHECKED ALARM TEST POINTS CHECK DETECTED RF AT CRI HIGH VSWR DETECTOR Replaced A2 Board Disconnected HYI TO Isolate problem Replace 4-Port Circulator Replace FL1 Filter			
REMARKS		TIME RECORD	5.0
		Troubleshoot time	26.7
		Repair Time	13.0
		Alignment & Calibration Time	
		TOTAL TIME	44.7
ENGINEERING St Russell 6 Jun 77	Q A ENGINEERING Mr. B. Hunt 6/6/77	AIR FORCE REPRESENTATIVE John P. Johnson 6/6/77	

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6 JUN 77</i>	TASK NO. <i>147</i>	BY:
MALFUNCTION SYMPTOMS <i>RT ALARM</i>			
MAINTENANCE STEPS PERFORMED <i>checked signal path</i> <i>checked Power supply voltages</i> <i>checked Power supply with load removed</i> <i>Disconnected Receiver</i> <i>Disconnected Synthesizer</i> <i>Disconnect +15V loads on TBI.</i> <i>Replace AR 2</i>			
REMARKS		TIME RECORD <i>5.0</i>	
		Troubleshoot time <u><i>5.75</i></u>	
		Repair Time <u><i>24.5</i></u>	
		Alignment & Calibration _____ Time _____	
		TOTAL TIME <u><i>35.25</i></u>	
ENGINEERING <i>Drumell 6 JUN 77</i>	QA ENGINEERING <i>m. B. Gunt 6/6/77</i>	AIR FORCE REPRESENTATIVE <i>John J. John 6/12/77</i>	

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input type="checkbox"/> Organizational <input checked="" type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6 JUN 77</i>	TASK NO. <i>175</i>	BY:
MALFUNCTION SYMPTOMS <i>ANT ALARM</i>			
MAINTENANCE STEPS PERFORMED <i>CHECKED SIGNAL PATH</i> <i>CHECKED ALARM TEST POINTS</i> <i>CHECKED SIGNAL AT CRI</i> <i>REMOVED CABLE TO CRI</i> <i>CONNECTED RF LOAD TO HY1 PORT 4</i> <i>Replace Circulator HY1.</i>			
REMARKS		TIME RECORD	<i>5.0</i>
		Troubleshoot time	<i>6.9</i>
		Repair Time	<i>5.3</i>
		Alignment & Calibration Time	
		TOTAL TIME	<i>17.2</i>
ENGINEERING <i>Pomrell 6 JUN 77</i>	QA ENGINEERING <i>M.B. Punt 6/6/77</i>	AIR FORCE REPRESENTATIVE <i>John N. Johnson 6/6/77</i>	



MAINTAINABILITY DEMONSTRATION ANALYSIS			<input checked="" type="checkbox"/> Organizational <input type="checkbox"/> Intermediate
SYSTEM AN/TEN-41	DATE 6/1/77	TASK NO. 16	BY:
MALFUNCTION SYMPTOMS IDENT CODE Lamp failure			
MAINTENANCE STEPS PERFORMED Replace RT			
REMARKS		TIME RECORD Troubleshoot time _____ Repair Time <u>1.8</u> Alignment & Calibration Time _____ TOTAL TIME <u>1.8</u>	
ENGINEERING 	QA ENGINEERING In. B. Hunt 6/1/77	AIR FORCE REPRESENTATIVE  6-1-77	

Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input checked="" type="checkbox"/> Organizational <input type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/1/77</i>	TASK NO. <i>12</i>	BY:
MALFUNCTION SYMPTOMS <i>RT alarm</i>			
MAINTENANCE STEPS PERFORMED <i>Replaced RT</i>			
REMARKS		TIME RECORD Troubleshoot time _____ Repair Time <u><i>2.1</i></u> Alignment & Calibration Time _____ TOTAL TIME <u><i>2.1</i></u>	
ENGINEERING <i>JM Rogers</i>	Q A ENGINEERING <i>Mr. B. Hunt</i> <i>6/1/77</i>	AIR FORCE REPRESENTATIVE <i>John N. Johnson</i> <i>6-1-77</i>	

Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input checked="" type="checkbox"/> Organizational <input type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/1/77</i>	TASK NO. <i>44</i>	BY:
MALFUNCTION SYMPTOMS <i>No indicator lamps light</i>			
MAINTENANCE STEPS PERFORMED <i>Disconnected antenna control cable lamps OK Replaced antenna</i>			
REMARKS		TIME RECORD Troubleshoot time _____ Repair Time <u><i>2.8</i></u> Alignment & Calibration _____ Time _____ TOTAL TIME <u><i>2.8</i></u>	
ENGINEERING <i>JM Rogers</i>	Q A ENGINEERING <i>M. B. Gunt 6/1/77</i>	AIR FORCE REPRESENTATIVE <i>John J. Johnson 6-1-77</i>	

Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input checked="" type="checkbox"/> Organizational <input type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/1/77</i>	TASK NO. <i>47</i>	BY:
MALFUNCTION SYMPTOMS <i>Compass failure</i>			
MAINTENANCE STEPS PERFORMED <i>Replace Compass</i>			
REMARKS		TIME RECORD	
		Troubleshoot time _____	
		Repair Time <u><i>2.0</i></u>	
		Alignment & Calibration Time _____	
		TOTAL TIME <u><i>2.0</i></u>	
ENGINEERING <i>JM Rogus</i>	Q A ENGINEERING <i>M. B. Hunt</i>	AIR FORCE REPRESENTATIVE <i>John T. Johnson 6-1-77</i>	

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input checked="" type="checkbox"/> Organizational <input type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/1/77</i>	TASK NO. <i>45</i>	BY:
MALFUNCTION SYMPTOMS <i>No Antenna Rotation - Antenna Alarm</i>			
MAINTENANCE STEPS PERFORMED <i>Replace Antenna</i>			
REMARKS		TIME RECORD Troubleshoot time _____ Repair Time <u><i>3.9</i></u> Alignment & Calibration _____ Time _____ TOTAL TIME <u><i>3.9</i></u>	
ENGINEERING <i>M. Rogers</i>	QA ENGINEERING <i>m. B. Hunt</i>	AIR FORCE REPRESENTATIVE <i>John H. Johnson</i> <i>6-1-77</i>	

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input checked="" type="checkbox"/> Organizational <input type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/1/77</i>	TASK NO. <i>19</i>	BY:
MALFUNCTION SYMPTOMS <i>Failed ON AIR lamp</i>			
MAINTENANCE STEPS PERFORMED <i>Replaced RT</i>			
REMARKS		TIME RECORD	
		Troubleshoot time _____	
		Repair Time <u><i>1.9</i></u>	
		Alignment & Calibration _____	
		Time _____	
		TOTAL TIME <u><i>1.9</i></u>	
ENGINEERING <i>JM Rogers</i>	QA ENGINEERING <i>M. B. Hunt 6/1/77</i>	AIR FORCE REPRESENTATIVE <i>John N. Johnson 6-1-77</i>	

Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input checked="" type="checkbox"/> Organizational <input type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/1/77</i>	TASK NO. <i>30</i>	BY:
MALFUNCTION SYMPTOMS <i>Aircraft reports no DME</i>			
MAINTENANCE STEPS PERFORMED <i>Replace RT</i>			
REMARKS		TIME RECORD	
		Troubleshoot time _____	
		Repair Time <u><i>3.7</i></u>	
		Alignment & Calibration Time _____	
		TOTAL TIME <u><i>3.7</i></u>	
ENGINEERING <i>JM Rogers</i>	Q A ENGINEERING <i>Mr. B. [Signature]</i>	AIR FORCE REPRESENTATIVE <i>[Signature]</i> <i>6-1-77</i>	

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input checked="" type="checkbox"/> Organizational <input type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/1/77</i>	TASK NO. <i>11</i>	BY:
MALFUNCTION SYMPTOMS <i>RT alarm</i>			
MAINTENANCE STEPS PERFORMED <i>Replaced RT</i>			
REMARKS		TIME RECORD	
		Troubleshoot time	_____
		Repair Time	<i>3.7</i>
		Alignment & Calibration Time	_____
		TOTAL TIME <i>3.7</i>	
ENGINEERING <i>J. M. Rogers</i>	QA ENGINEERING <i>W. B. Runt</i>	AIR FORCE REPRESENTATIVE <i>John N. Johnson</i> <i>6-1-77</i>	

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input checked="" type="checkbox"/> Organizational <input type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/1/77</i>	TASK NO. <i>37</i>	BY:
MALFUNCTION SYMPTOMS <i>Does not go into standby in DEMAND only mode</i>			
MAINTENANCE STEPS PERFORMED <i>Replaced RT</i>			
REMARKS		TIME RECORD	
		Troubleshoot time _____ Repair Time <u><i>2.1</i></u> Alignment & Calibration _____ Time _____	
		TOTAL TIME <u><i>2.1</i></u> MIN.	
ENGINEERING <i>JM Roger</i>	Q A ENGINEERING <i>m. B Hunt 6/1/77</i>	AIR FORCE REPRESENTATIVE <i>John D. Johnson 6-1-77</i>	

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input checked="" type="checkbox"/> Organizational <input type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/1/77</i>	TASK NO. <i>2</i>	BY:
MALFUNCTION SYMPTOMS <i>Antenna alarm</i>			
MAINTENANCE STEPS PERFORMED <i>Replaced antenna failure still existed</i> <i>Replaced RT</i>			
REMARKS		TIME RECORD	
		Troubleshoot time _____ Repair Time <u><i>5.1</i></u> Alignment & Calibration _____ Time _____ TOTAL TIME <u><i>5.1</i></u>	
ENGINEERING <i>[Signature]</i>	Q A ENGINEERING <i>In. B Hunt 6/1/77</i>	AIR FORCE REPRESENTATIVE <i>[Signature]</i>	

Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input checked="" type="checkbox"/> Organizational <input type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/1/77</i>	TASK NO. <i>8</i>	BY:
MALFUNCTION SYMPTOMS <i>RT alarm</i>			
MAINTENANCE STEPS PERFORMED <i>Replaced RT</i>			
REMARKS		TIME RECORD	
		Troubleshoot time	_____
		Repair Time	<i>3.1</i>
		Alignment & Calibration Time	_____
		TOTAL TIME <i>3.1</i>	
ENGINEERING <i>J. Rogers</i>	Q A ENGINEERING <i>W. B. Hunt 6/1/77</i>	AIR FORCE REPRESENTATIVE <i>John W. Jones</i>	

Figure 3.

MAINTAINABILITY DEMONSTRATION ANALYSIS			<input checked="" type="checkbox"/> Organizational <input type="checkbox"/> Intermediate
SYSTEM <i>AN/TRN-41</i>	DATE <i>6/1/77</i>	TASK NO. <i>26</i>	BY:
MALFUNCTION SYMPTOMS <i>CB types</i> <i>Input power &</i>			
MAINTENANCE STEPS PERFORMED <i>Replaced R.T.</i>			
REMARKS		TIME RECORD Troubleshoot time _____ Repair Time <u>3.3</u> Alignment & Calibration _____ Time _____ <div style="text-align: right;"> TOTAL TIME <u>3.3 MIN.</u> </div>	
ENGINEERING <i>[Signature]</i>	Q A ENGINEERING <i>M. B. [Signature]</i>	AIR FORCE REPRESENTATIVE <i>[Signature]</i>	

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